

Work Order ID 93826

93826

Page 1

December 5, 2012 1:30:39 PM

Item ID: 647.9312

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket

Start Date: 11/26/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Work Center	Description	Run Hours	Cost	Var	Accept Qty	Reject Qty	Reject Number	sp. Stamp
Draw Nbr	Revision Nbr							
647.9300	N/C DA	0.00						
100		0.00						
100								
Bandsaw	Memo	0.00						
Jeaspa Bandsaw	CUT AT 4.00" LONG							
110		0.00						
110								
Outsource5	Memo	0.00						
Outsource process - Machining	ISSUE P/O: 19589							
	POSSIBLE SUPPLIER: ARCHER PRECISION							
	Certificate of conformaty required							
115	Receive & Inspect for Damage & Mat'l Certs	0.00						
115								
Packaging	Memo	0.00						
Packaging								

PL 12-6-12

43/3/21 (2)

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY										
Landing Gear			General							
<input type="checkbox"/> Bending	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> Cracks	<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Wave/Twist in Tube
<input type="checkbox"/> Bend	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Burrs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Countersink	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Drawing	<input type="checkbox"/> Finish	<input type="checkbox"/> Folio
<input type="checkbox"/> Grain	<input type="checkbox"/> Hardware	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Misread	<input type="checkbox"/> Offset	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Ovalized	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced	<input type="checkbox"/> Temperature/Cure	<input type="checkbox"/> Weld	<input type="checkbox"/> Wrong Stock Pulled
							<input type="checkbox"/> Other			

Work Order ID 93826

93826

Page 3

December 5, 2012 1:30:39 PM

Item ID: 647.9312

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bracket

Work Order ID 93826

93826

Page 2

December 5, 2012 1:30:39 PM

Item ID: 647.9312

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bracket

Start Date: 11/26/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

QC: Date: SPC (Y/N): Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
117 *117* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00				2			
118 *118* HandFinish Hand Finishing	Memo REMOVE ALL PART MARKINGS	0.00 0.00				2		161342	
120 *120* Outsource4 Outsource process - Anodize	Memo HARD ANODIZE IAW MIL-A-8625 TYPE 3 COLOUR BLACK	0.00 0.00						CZ 13104104 (2)	P/O: 19493

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS
	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Crosstube <input type="checkbox"/> Water Jet <input type="checkbox"/> Engineering <input type="checkbox"/>

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Crosstube <input type="checkbox"/> Water Jet <input type="checkbox"/> Engineering <input type="checkbox"/>
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/> Small Fab <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Quality <input type="checkbox"/>
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/> Finishing <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Other <input type="checkbox"/>
	Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/> Composite <input type="checkbox"/> Supplier <input type="checkbox"/>

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

Work Order ID 93826

93826

Page 4

December 5, 2012 1:30:39 PM

Item ID: 647.9312

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket

Start Date: 11/26/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 10.00

10

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC14- Inspect Spray Paint

0.00

160

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location: ST/396 0.00

170

Packaging

Memo

0.00

Packaging

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

Quality Control

(+2)

2X 50 13-6-4

MLJ 13-06-05

13-06-05

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Picklist Print

December 5, 2012 1:30:39 PM

Page 1

Work Order ID: 93826

Parent Item: 647.9312

Parent Item Name: Bracket

Start Date: 11/26/12

Required Date: 12/14/12

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A NEW ISSUE 12-11-19 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.9312P Bracket		Purchased	No				Each	0.0000		10		02/21/12	
M7075T6B1.750X04.500 7075-T6 BAR 1.750" X 4.500"		Purchased	No				f	0.0000		0.6648936			

M124030

Q68 12-12-20

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03209

SHEET 1 OF 2

DWG NO. 647.9300

REV: N/C

PREPARED BY A. QUAN

DATE: 11/09/11

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: BRACKET

APPROVED BY: ENGR

MFG

QC

EFF:

CURRENT ORDER AND STOCK

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED HOLE LOCATIONS ON 647.9314, ADDED HOLE 647.9315

SHEET 1, ZONE B3:

NOTES: UNLESS OTHERWISE SPECIFIED

⚠ MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.

⚠ FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE II, CLASS 2, COLOR: BLACK;
PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J TYPE I, CLASS N.

3 DEBURR AND BREAK ALL SHARP EDGES.

4 IDENTIFY IAW MPP-120 LASER ENGRAVE CENTURY GOTHIC, 12 POINT P/N AND REVISION.

⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9310 LH BRACKET.SLDPRT, LAST MODIFIED 06-22-10.

⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9311 SUPPORT BRACKET.SLDPRT, LAST MODIFIED 06-22-10.

⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9312 BRACKET.SLDPRT, LAST MODIFIED 06-22-10.

⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9313 BRACKET.SLDPRT, LAST MODIFIED 06-22-10.

⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9314 RETAINER BRACKET.SLDPRT, LAST MODIFIED 09-26-11.

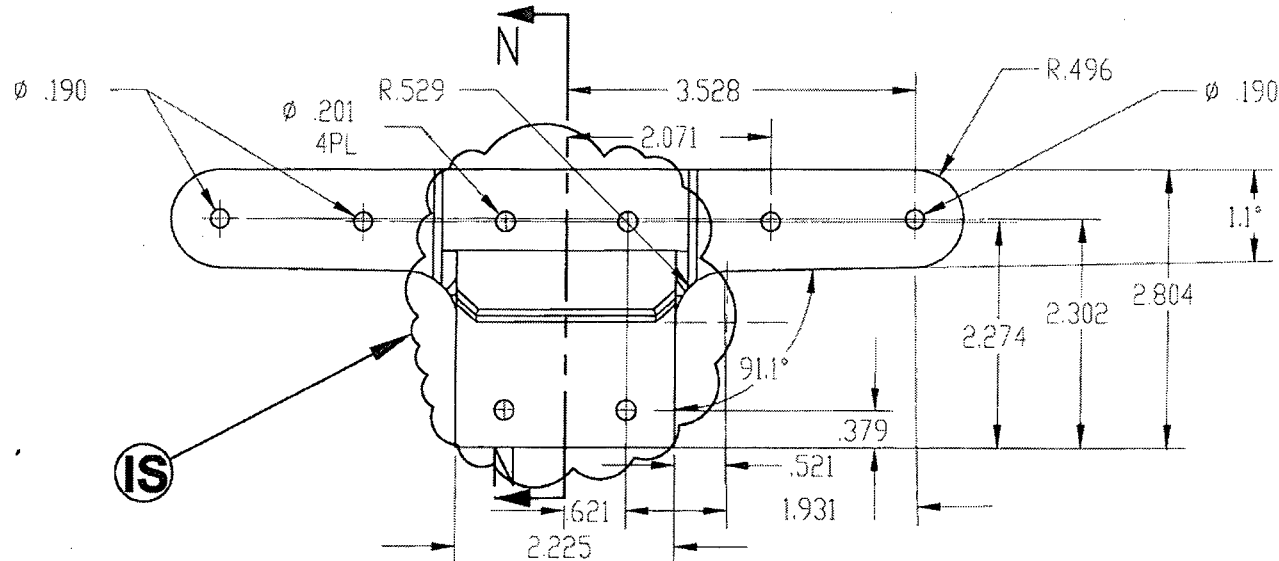
⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9315 RECEPTACLE BRACKET.SLDPRT, LAST MODIFIED 10-19-11.

⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9316 CASSEAR BRACKET.SLDPRT, LAST MODIFIED 06-22-10.

⚠ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9317 RH BRACKET.SLDPRT, LAST MODIFIED 06-22-10.

IS

SHEET 7, ZONE B4:



SHEET 1
REVISION
ENGINEER
UNCONTROLLED
SUBJECT TO
WITH
WORKING
NO. 9.3.826 MCLJ
12-11-27

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRU <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

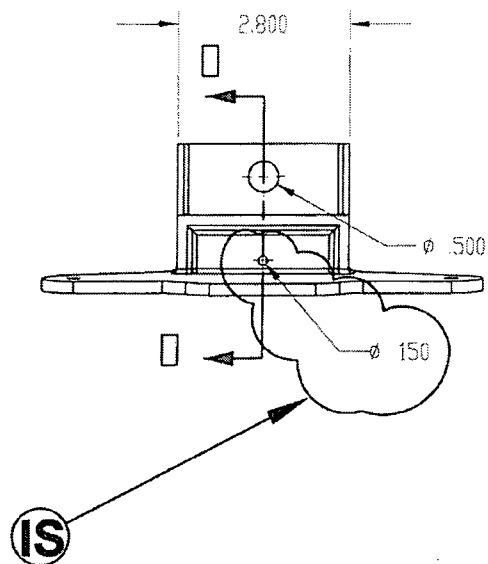
93826

APICAL INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03209

SHEET 2 OF 2

SHEET 8, ZONE B5:



F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION

93826

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NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2. COLOR: BLACK; PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J TYPE I, CLASS N.
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120. LASER ENGRAVE CENTURY GOTHIC, 12 POINT P/N AND REVISION.
5. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9310 LH BRACKET.SLDPRG, LAST MODIFIED 06-22-10.
6. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9311 SUPPORT BRACKET.SLDPRG, LAST MODIFIED 06-22-10.
7. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9312 BRACKET.SLDPRG, LAST MODIFIED 06-22-10.
8. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9313 BRACKET.SLDPRG, LAST MODIFIED 06-22-10.
9. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9314 RETAINER BRACKET.SLDPRG, LAST MODIFIED 06-22-10.
10. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9315 RECEPTACLE BRACKET.SLDPRG, LAST MODIFIED 06-22-10.
11. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9316 CROSSBAR BRACKET.SLDPRG, LAST MODIFIED 06-22-10.
12. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9317 RH BRACKET.SLDPRG, LAST MODIFIED 06-22-10.

UNINCORPORATED ECN(S)

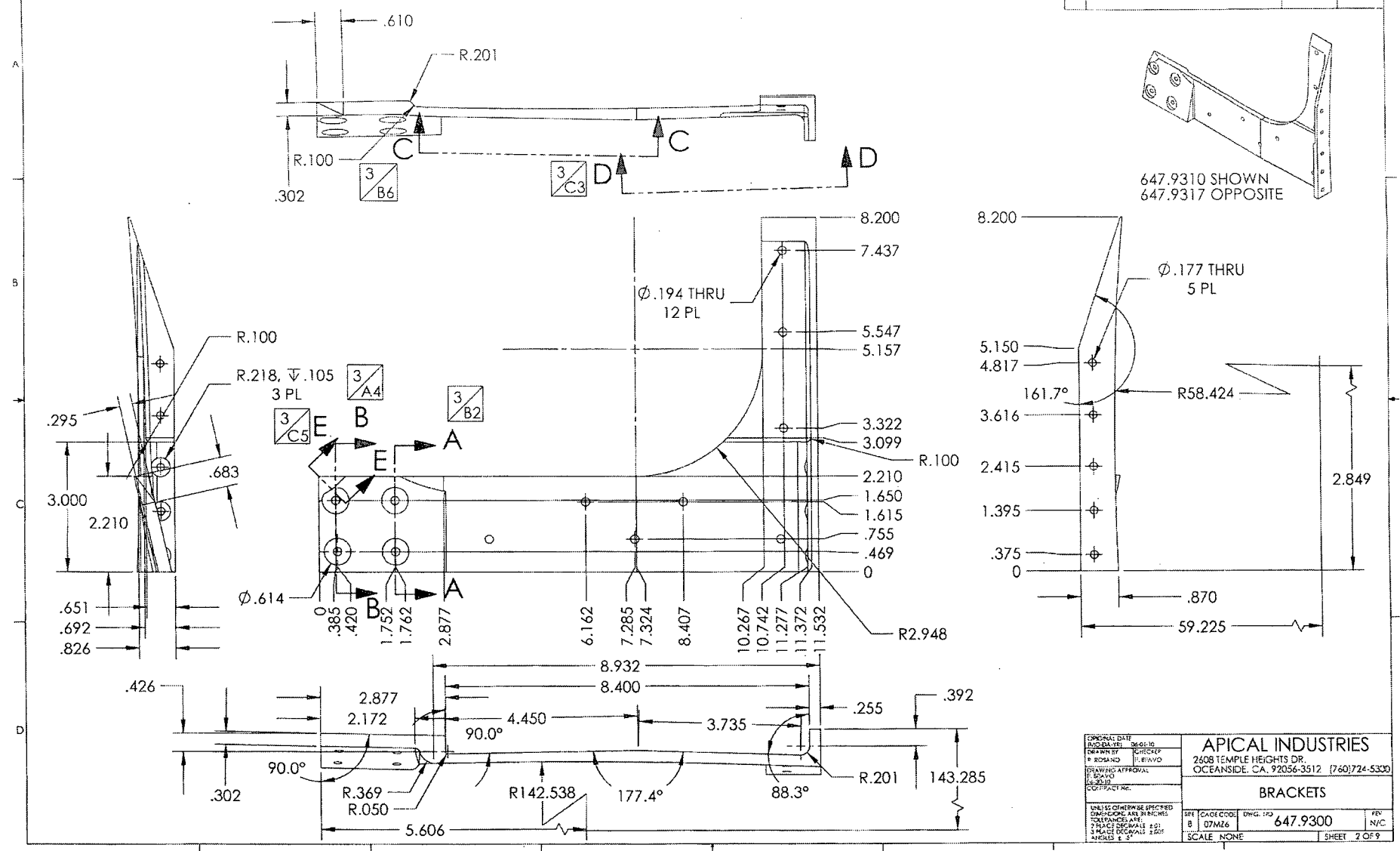
03209

647.9317	RH BRACKET	△	△	△
647.9316	CROSSBAR BRACKET	△	△	△
647.9315	RECEPTACLE BRACKET	△	△	△
647.9314	RETAINER BRACKET	△	△	△
647.9313	BRACKET	△	△	△
647.9312	BRACKET	△	△	△
647.9311	SUPPORT BRACKET	△	△	△
647.9310	LH BRACKET	△	△	△
FIND #	PART #	DESCRIPTION	MATL	SPEC.
QTY	PARTS LIST			
NEXT ASSY (S)	APICAL INDUSTRIES			
647.8900	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300			
	BRACKETS			
	DEL	CAGE CODE	QWG. NO.	REV.
	B	07M26	647.9300	N/C
	SCALE: NONE		SHEET 1 OF 2	

93826

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REV	DESCRIPTION	DATE	APPROVED

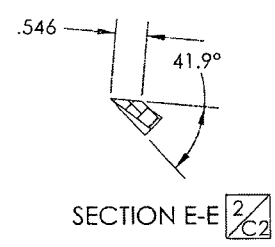
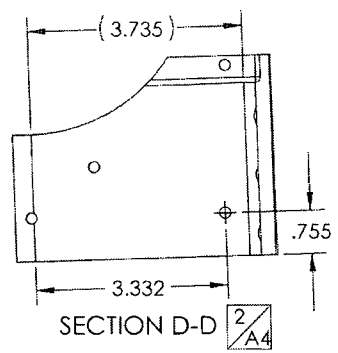
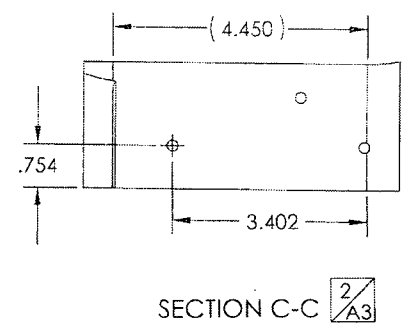
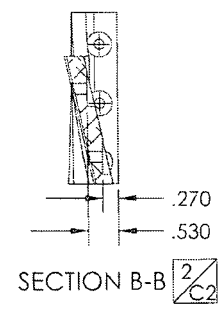
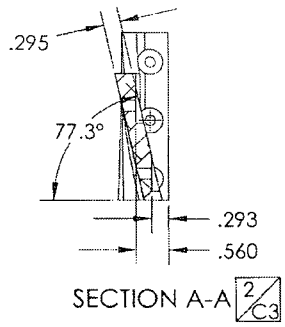


ORIGINAL DATE REVISIONS DRAWN BY CHECKED BY DESIGNED BY DRAWING APPROVAL P. BOARD C. BOARD CONTRACT NO.	07/01/10 J. B. HAYDO J. B. HAYDO J. B. HAYDO J. B. HAYDO J. B. HAYDO J. B. HAYDO J. B. HAYDO	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 BRACKETS SCALE: NONE SHEET 2 OF 9	DATE OF ORDER ORDER NO. QUANTITY PRICE TOTAL TAX NET PAYABLE DUE DATE	647.9300 07/01/10 1 N/C
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93826

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REV.	DESCRIPTION	DATE	APPROVED

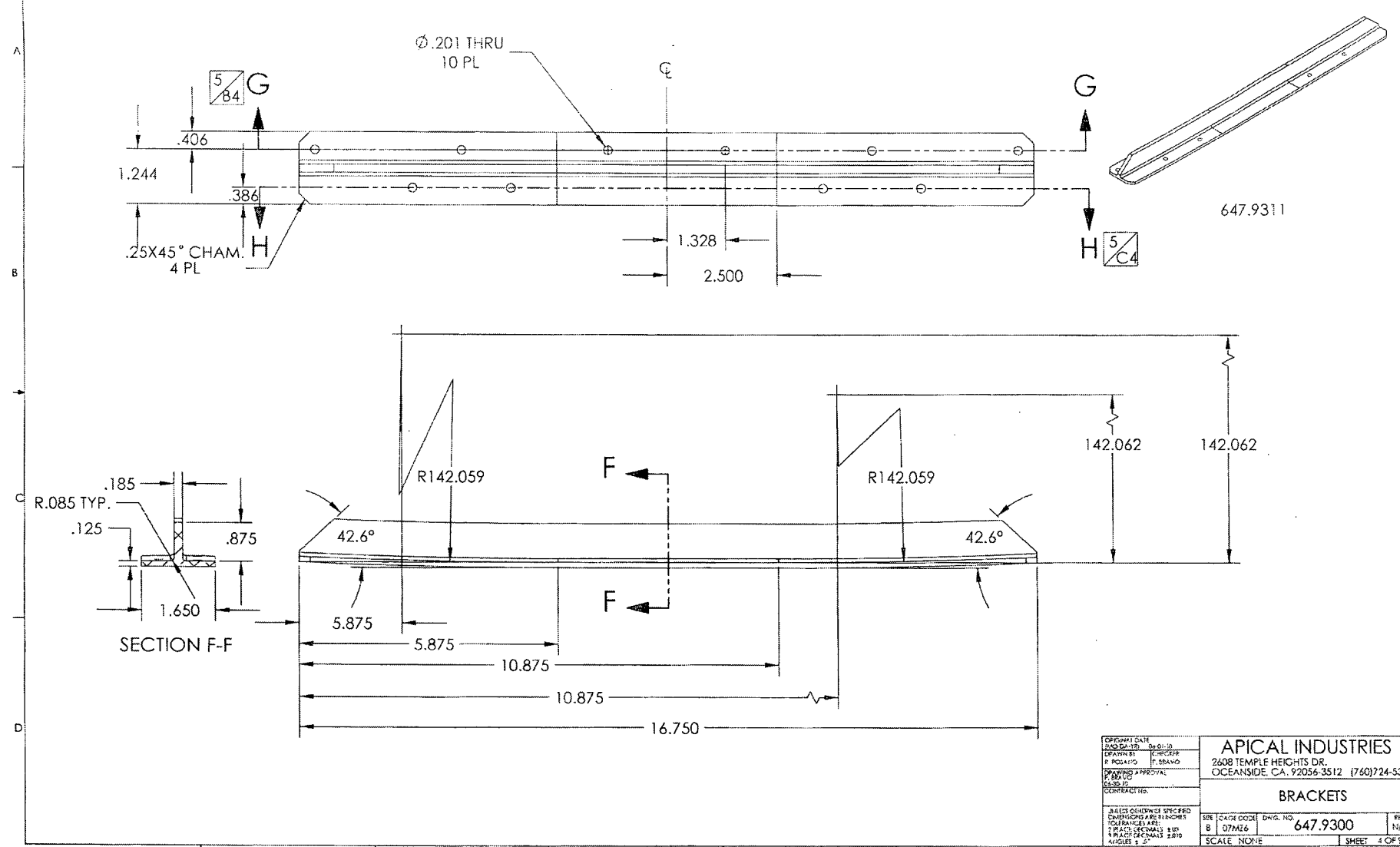


ORIGINAL DATE IND-CA-781 06-01-80		APICAL INDUSTRIES	
DRAWN BY R. POLANO	CHECKED R. BRAYO	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL R. BRAYO		BRACKETS	
SHEET NO. CONTRACT NO.		SHEET B	REV. N/C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE: 2 PLACE DECIMALS = 64 3 PLACE DECIMALS = 128 ANGLES = 1°		CAGE CODE U77426	DWG. NO. 647.9300
SCALE: NONE		SHEET 3 OF 5	

93826

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REV	DESCRIPTION	DATE	BY

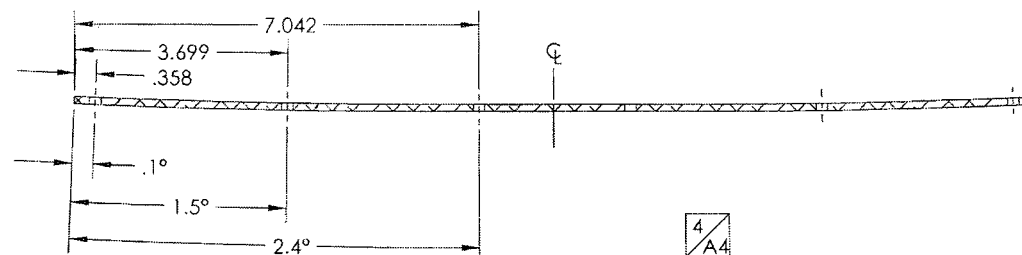


DATE DESIGNED BY DRAWN BY CHECKED BY APPROVED BY CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 BRACKETS SRE: 07M26 647.9300 SCALE: NONE	REV: N/C SHEET: 4 OF 9
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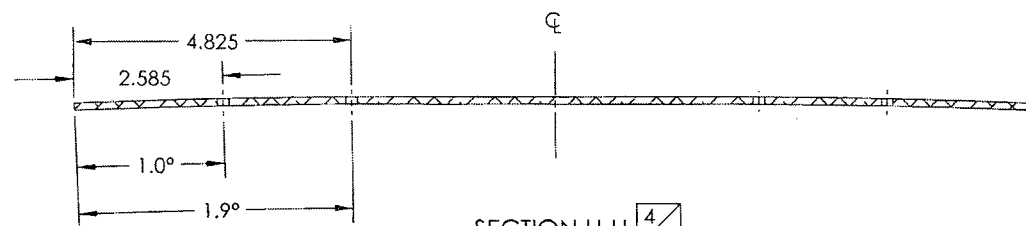
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REV	DESCRIPTION	DATE	APPROVED



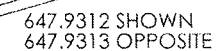
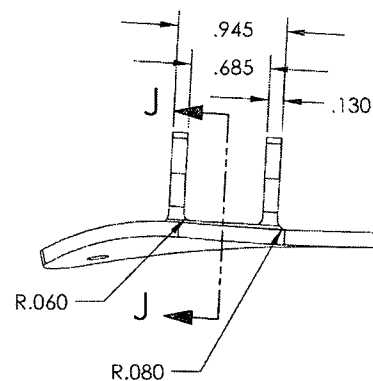
SECTION G-G



SECTION H-H

ORIGINAL DATE		APICAL INDUSTRIES	
INCHES: 1" = 1"	DATE: 01/01/01	2608 TEMPLE HEIGHTS DR.	
DESIGNED BY: K. ROSANO	CHECKED BY: P. BRAVO	OCEANSIDE, CA. 92056-3512 (760)724-5500	
PREPARED BY: P. BRAVO	APPROVED BY: P. BRAVO	BRACKETS	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED		SIZE: 1/8" X 1/2" X 1/4"	DRG. NO. 647.9300
DIMENSIONS ARE IN INCHES		DATE: 07/02/06	REV. N/C
TOLERANCES: .005		SCALE: NONE	SHEET 5 OF 9
3 PLACE DECIMALS ±.005			
ANGLES ±.5°			

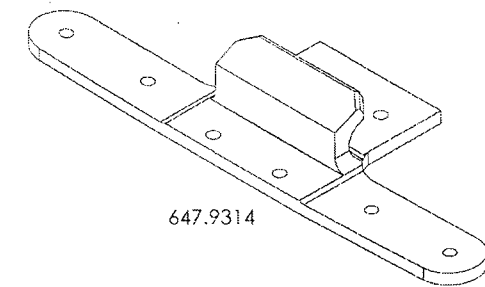
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
ARCELORMITTALS. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF ARCELORMITTALS IS PROHIBITED.

[illegible]

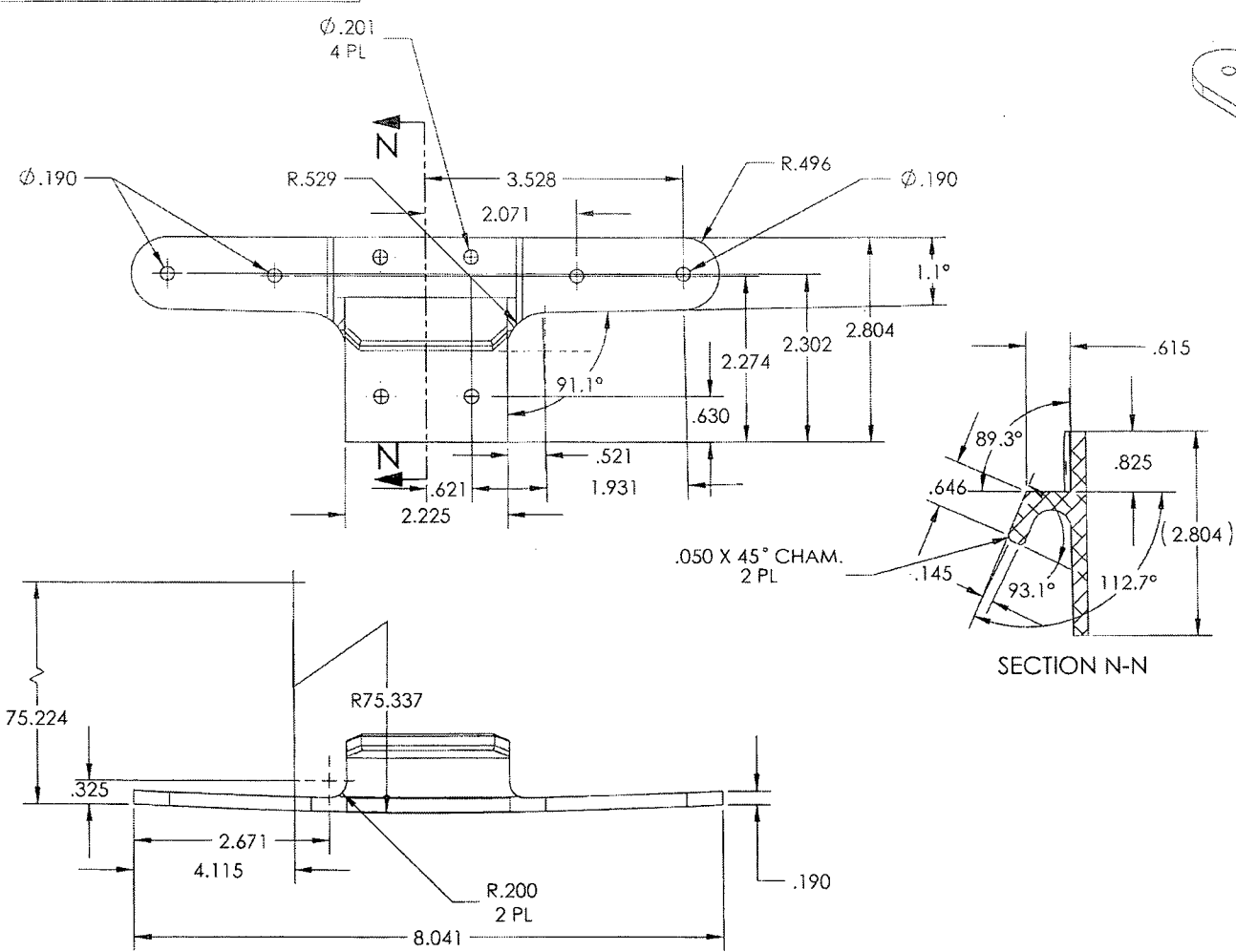
93826

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REV.	DESCRIPTION	DATE	APPROVED



647.9314



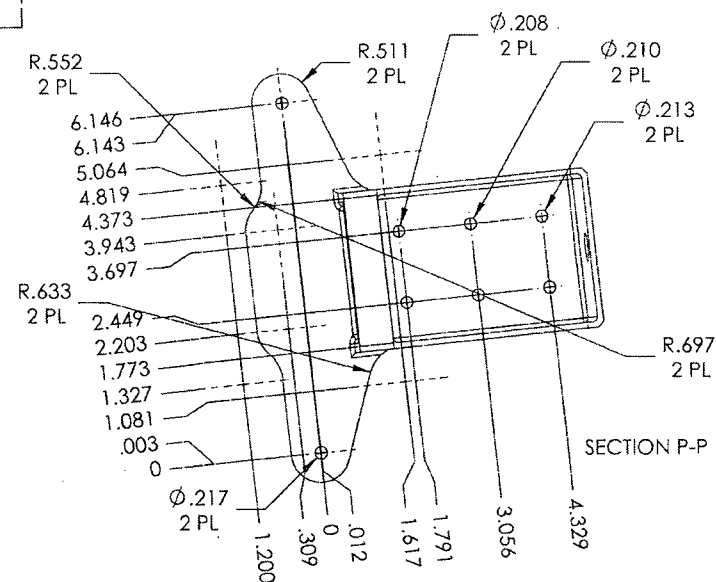
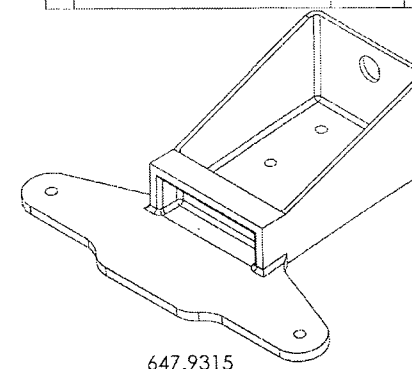
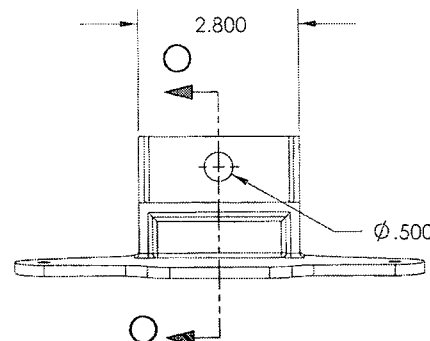
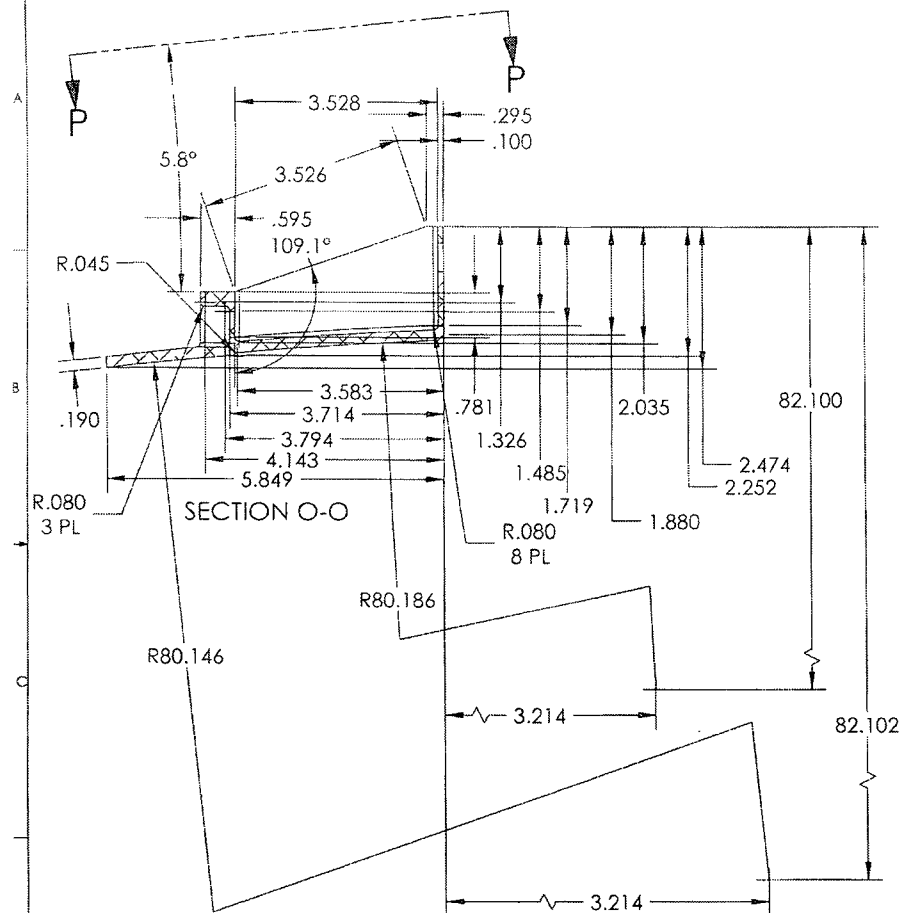
SECTION N-N

ORIGINAL DATE		APICAL INDUSTRIES	
DRAWN BY	CHECKED	2608 TEMPLE HEIGHTS DR.	
M. FLORES	P. BRAVO	OCEANSIDE, CA. 92056-3512 (760)724-5300	
DESIGNED BY	APPROVED	BRACKETS	
P. BRAVO			
CONTRACT NO.			
ALL DIMENSIONS ARE IN INCHES		REV. CAGE CODE	DWG. NO.
TOLERANCES ARE:		B 07M16	647.9300
3 PLACE DECIMALS ±.003		SCALE NONE	SHEET 7 OF 9
3 PLACE DECIMALS ±.010			
ANGLES ±.2°			

93826

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REV.	DESCRIPTION	DATE	APPROVED

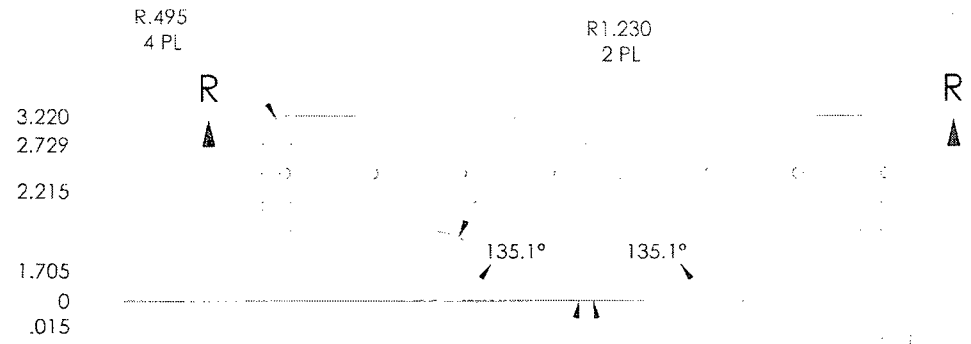


ORIGINAL DATE MODIFIED DATE DRAWN BY CHECKED BY DESIGNED BY APPROVED BY SCALE CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 BRACKETS SEE CASE CODE B 07M26 SCALE NONE	DWG. NO. 647.9300 SHEET 8 OF 9
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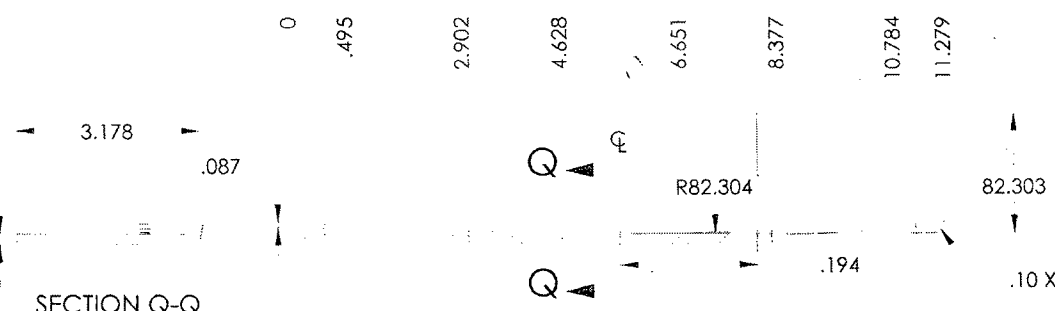
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A



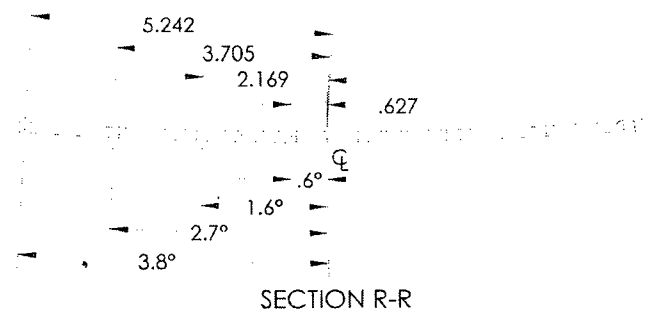
B



C

SECTION Q-Q

D



SECTION R-R

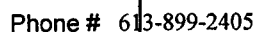
ORIGINAL DATE: 06-01-10
 DRAWN BY: C. D. DUFFY
 E. ROBERTO
 P. B. BAYO
 DRAWING APPROVAL:
 06-01-10
 CONTRACT NO.

APICAL INDUSTRIES
 2608 TEMPLE HEIGHTS DR.
 OCEANSIDE, CA. 92056-3512 (760)724-5300

BRACKETS

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 10 DECIMALS ARE
 1 TRAILER DECIMALS - .05
 3 TRAILER DECIMALS - .001
 ALL DIMENSIONS ARE TO CENTER UNLESS NOTED OTHERWISE

SHEET: 07M26
 B 07M26
 SCALE: NONE
 647.9300
 N/C
 SHEET 9 OF 9



Date	Invoice #
3/22/2013	444

Ship To
Main Finished Goods Location Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7

P.O. No.	Ship	Via	FOB	Project
1859	3/22/2013	FedEx	Archer	

	Qty	Item Code	Description
	8 2	Sales Sales	647.9313 - Bracket (two scrapped during set-up) 647.9312 - Bracket HST (ON) on sales



2228 Gladwin Cres.
Ottawa, Ont.
K1B 4S6

Telephone (613) 899-2405
Fax (613) 226-1719

Certificate of Compliance

To:
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury Ont.
K6A 1K7

Po Number	Part Number	Quantities
1859	647.9313	8
	647.9312	2

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 1859 issued by Dart Aerospace Inc.

Andrew Malcolm
Inspector
Archer Precision Inc.
2228 Gladwin Cress.
Ottawa, Ontario
K1B 4S6



Inspection Report

Customer Name Dart Aerospace		QTY 2 pc	DWG # 647.9312	REV. N/C	Part Name BRACKETS	Date 16/JAN/13	Lot#	Job # 674-6
Page 1 of _____		Inspection Interval		Special Notes				

Item #	DWG. Dim	Tolerance	Operator	QA First		QA Final		2	3	4	5	6	7	8	9	10
				A	R	A	R									
	Rev	N/C	✓	✓												
	MAT	SUPPLIED	✓	✓												
	SUB	-														
	Deburr	YES	✓	✓												
1	.504	±.01	502	✓		✓		.503								
2	1.9°	±5°	PP	✓		✓										
3	3.194	±.01	3.193	✓		✓		3.193								
4	2.464	±.01	PP	✓		✓										
5	.480	±.01	PP	✓		✓										
6	10.3°	±5°	PP	✓		✓										
7	.505	±.01	PP	✓		✓										
8	.496	±.01	PP	✓		✓										
9	Ø.190	±.01	.190	✓		✓		.190								
10	THRU	-	✓	✓		✓		✓								
11	3X	-	✓	✓		✓		✓								
12	.471	±.01	PP	✓		✓										
13	.488	±.01	PP	✓		✓										
14	3.151	±.01	PP	✓		✓										
15	12.9°	±5°	PP	✓		✓										
16	.945	±.01	.943	✓		✓		.942								
17	.685	±.01	.684	✓		✓		.684								
18	.130	±.01	.128	✓		✓		.127								
19	R.080	±.01	PP	✓		✓										
20	R.060	±.01	PP	✓		✓										
21	1.328	±.01	PP	✓		✓										
22	145.5°	±5°	PP	✓		✓										



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62347

Date: 30-Apr-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description	Rev:	
1 lot	Part: ASST 12 PCS D2055 BLACK ANODIZE MIL-A-8625 TYPE II CLASS 2 12 PCS 645.3012 8 PCS 646.9710 7 PCS 647.1610 2 PCS 647.9312 10 PCS 647.9610 9 PCS 647.9612 7 PCS 647.9613 8 PCS 647.9313 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20130248		PO: 19493 Line:
<p align="center">Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE: <u>30/4/13</u></p> <p>CERTIFIED SIGNATURE: <u>[Signature]</u></p> <p>RECEIVER SIGNATURE: <u>Suzanne Pelon</u></p>			